



WASHINGTON STATE LEGISLATURE  
**Office of the State Actuary**

October 15, 2004

**TO:** Steve Nelsen, Executive Director  
LEOFF 2 Retirement Board

**FROM:** Marty McCaulay, Associate Actuary  
Office of the State Actuary

**CC:** Matt Smith, State Actuary  
Office of the State Actuary

**RE: PROPOSED LEOFF 2 DISABILITY BENEFIT IMPROVEMENTS -  
UPDATED**

We reviewed three proposed improvements for the LEOFF 2 disability benefits. Option 1 would provide a disability retirement benefit equal to the accrued benefit, unreduced for early commencement, for duty-related disability, whether total or occupational. Option 2 would provide a disability retirement benefit equal to 70% of pay, unreduced for early commencement, for duty-related total disability, using a strict definition of total disability as defined by the Social Security Administration.

**Costs**

The cost for Option 1 (removal of reduction factor, total or occupational) is a total increase in the contribution rate of 0.40% (0.20% member and 0.20% employer), a total employer cost increase for the 2005-07 biennium of \$4.5 million, and a 25-year total employer cost increase of \$127.8 million.

The cost for Option 2 (70% of pay, total disability only) is a total increase in the contribution rate of 0.16% (0.08% member and 0.08% employer), a total employer cost in the 2005-07 biennium of \$1.8 million, and a 25-year total employer cost increase of \$51.2 million.

2100 Evergreen Park Drive S.W., Suite 150  
P.O. Box 40914  
Olympia, WA 98504-0914  
(360) 753-9144

FAX: (360) 586-8135  
TDD: 1-800-635-9993

E-MAIL: [actuary\\_st@leg.wa.gov](mailto:actuary_st@leg.wa.gov)

### **Assumptions**

The costs depend on our assumptions for the probability of disability and post-disablement mortality. This includes assumptions for total disability, occupational disability, and duty-related disability. We needed to increase our existing assumptions for rates of disability because currently members who become disabled may elect to receive terminated vested benefits or retirement benefits because the disability benefits are the actuarial equivalent of those benefits. The removal of the actuarial equivalent factor would change members' selection of benefits.

We used disability rates used by Colorado Police and Fire. We assume that 85% of disabilities are duty related. We assume that 20% of all disabilities are total disabilities and 80% are occupational disabilities (the inability to continue working in law enforcement or firefighting). Otherwise we used the same assumptions as in the 2002 actuarial valuation report. We did not change our assumption for post-disablement mortality (although the mortality experience for those severely disabled would be expected to be less favorable than for those with occupational disabilities). Also, we did not include any waiting period for benefit commencement.

### **Option 1 – Removal of Reduction Factor**

The Option 1 disabilities would be duty-related, but they could be total disabilities or occupational disabilities (the inability to perform one's occupation). The actual experience would depend on how the definition of disability is interpreted. We expect 31 of these disabilities for the current year. The cost increase for Option 1 is summarized below:

<b>Option 1</b>	
<b>(Removal of reduction factor)</b>	
Employee rate increase	0.20%
Employer rate increase	0.12%
State rate increase	0.08%
Total increase	0.40%

  

<b>2005-2007 Biennium</b>	
<b>(\$ in millions)</b>	
State General Fund	\$1.8
State Non-General Fund	\$0.0
Total State	\$1.8
Local Government	\$2.7
Employer Total	\$4.5
Employee	\$4.4

<b>2005-2030 25 Years</b>	
(\$ in millions)	
State General Fund	\$51.0
State Non-General Fund	\$0.0
Total State	\$51.0
Local Government	\$76.8
Employer Total	\$127.8
Employee	\$127.6

### Option 2 – 70% of Pay

The benefit under Option 2 would be 70% of a one-year average pay, with the benefit continuing past normal retirement age. The Option 2 disabilities could be more severe than under Option 1. Disabilities would need to be total disabilities, and also duty-related. We expect 6 of these disabilities for the current year. The cost increase for Option 2 is summarized below:

<b>Option 2</b>	
(Removal of reduction factor)	
Employee rate increase	0.08%
Employer rate increase	0.05%
State rate increase	0.03%
Total increase	0.16%

<b>2005-2007 Biennium</b>	
(\$ in millions)	
State General Fund	\$0.7
State Non-General Fund	\$0.0
Total State	\$0.7
Local Government	\$1.1
Employer Total	\$1.8
Employee	\$1.8

<b>2005-2030 25 Years</b>	
(\$ in millions)	
State General Fund	\$19.1
State Non-General Fund	\$0.0
Total State	\$19.1
Local Government	\$32.1
Employer Total	\$51.2
Employee	\$51.0